

**ROCKY FLATS PLANT**  
**NEPA DIVISION, PLANT REVIEW**  
**CATEGORICAL EXCLUSION WORKSHEET**

1. Date: 10/1/91
2. Activity/Project Name: IAG Site Characterization Activities in Floodplains/Wetlands for OUs 1, 2, 5 and 6 and the Geologic Characterization Program
3. Authorization or EJO:
5. NEPA Division Reviewer: Bill Moore
6. Categorical Exclusion Proposed:

"Site characterization and environmental monitoring, including siting, construction or operation of characterization and monitoring devices, under CERCLA and RCRA, if the activities would not . . . adversely affect environmentally sensitive areas . . ."

NOTE: EC 59-91, ("IAG Site Characterization Activities") was reviewed by NCC on May 22, 1991. That project was recommended for a CX under the same exclusion proposed here. The current activities are a sub-set of the activities included in the earlier EC. In reviewing the proposed CX, DOE HQ determined (in RFO/CX-017-91, copy attached) that the CX would only apply to site characterization activities outside floodplains and wetlands. HQ directed that another proposed CX be prepared for the work in floodplains, describing what effects, if any, such work would have on the floodplain/wetlands so it could be determined if a CX were applicable to the floodplain/wetland work. The present document is that second proposed CX

Would the proposed action:

7. Adversely affect federally-listed endangered, threatened, or proposed candidate species, or state-listed endangered or threatened species or their habitat?  
  
No.
8. Adversely affect floodplains or wetlands?  
  
No
9. Threaten public health or safety?  
  
No
10. Have possible effects on the environment which are likely to be highly controversial?  
  
No

11. Have possible effects on the environment which are highly uncertain or involve unique or unknown risks?

No

12. Establish a precedent for future actions that will have significant effects, or represent a decision in principle about a future consideration?

No

13. Be substantially related to other actions that have individually insignificant but cumulatively significant impacts?

No

14. Adversely effect federal, state, or locally designated natural areas, prime agricultural land, special water sources, or historic, archeological, or architectural sites?

No

15. Other comments.

Of the various aspects of the project, drilling is the most disruptive. Drilling will take place in, but have no adverse effects on, the 100-year floodplain. It is possible that some drilling may also take place in wetlands but the activity is of such a nature as to cause no adverse effects to wetlands.

**EXPLANATION**



ESTIMATED MAXIMUM EXTENT OF SURFICIAL SOILS CONTAINING TWO TYPES OF ACTIVITY OF LOW PRODUCTIVITY



10 ACRE SAMPLING PLOT LOCATIONS



10 ACRE SAMPLING PLOT LOCATIONS NORTH AND SOUTH OF OPERATION UNIT 2



2.5 ACRE SAMPLING PLOT LOCATIONS



SOIL TYPE BOUNDARY AND NUMBER

SOURCE: U.S. DEPARTMENT OF AGRICULTURE, 1980

SOIL TYPE NUMBER SERIES

- 27 DENNER BOUTEN
- 31 DENNER BOUTEN-MIDWAY
- 42 ENGLEWOOD
- 45 FLORENCE
- 80 HAWKINS
- 88 LEBLANC-PHILBIN-STANLEY
- 100 MERRILLAND
- 102 MERRILLAND
- 103 MERRILLAND
- 146 MERRILLAND
- 174 MERRILLAND-LEITCH



1" = 1000'



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OPERABLE UNIT NO. 2

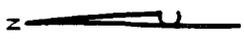
PHASE II R1/R2 WORK PLAN (ALLUVAL)

PROPOSED SURFICIAL SOIL SAMPLING  
PLOT IDENTIFICATION NUMBERS





N



0 100 200  
SCALE: 1" = 200'

**EXPLANATION**

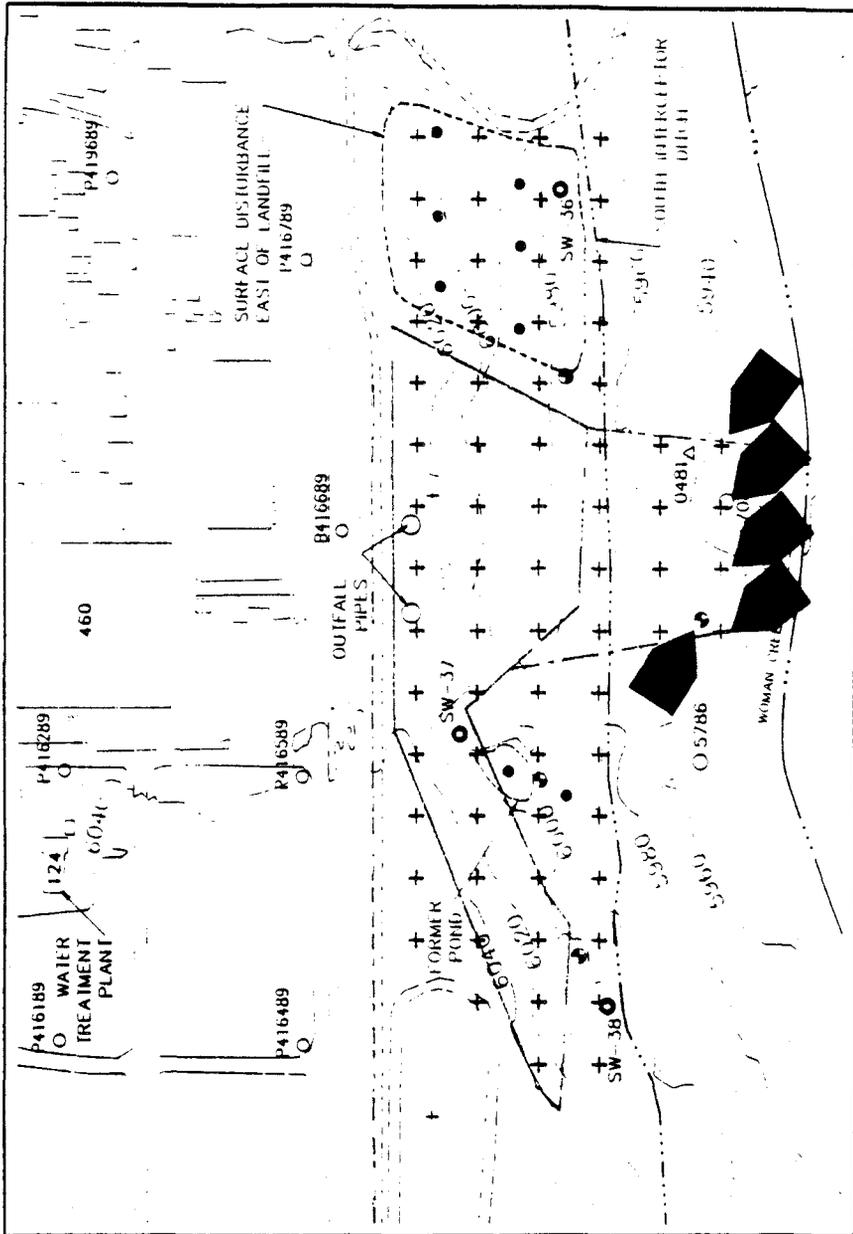
- SW 1
- 5/86
- △ 0481
- INDIVIDUAL HAZARDOUS SUBSTANCE SITE
- EXISTING SURFACE WATER SAMPLING LOCATION
- EXISTING ALLUVAL GROUNDWATER MONITORING WELL
- △ PRE-1986 MONITORING WELL
- INTERMITTENT STREAM
- DIRT ROAD
- 124 | ROCKY FLATS BLDG NO.
- PRELIMINARY EXTENSION OF THE LANDFILL BASED ON A SITE RECONNAISSANCE
- PROPOSED WELL LOCATION\*
- PROPOSED SOIL BORING LOCATION\*
- + PROPOSED SOIL GAS SAMPLE\*
- \*ALL PROPOSED LOCATIONS ARE APPROXIMATE

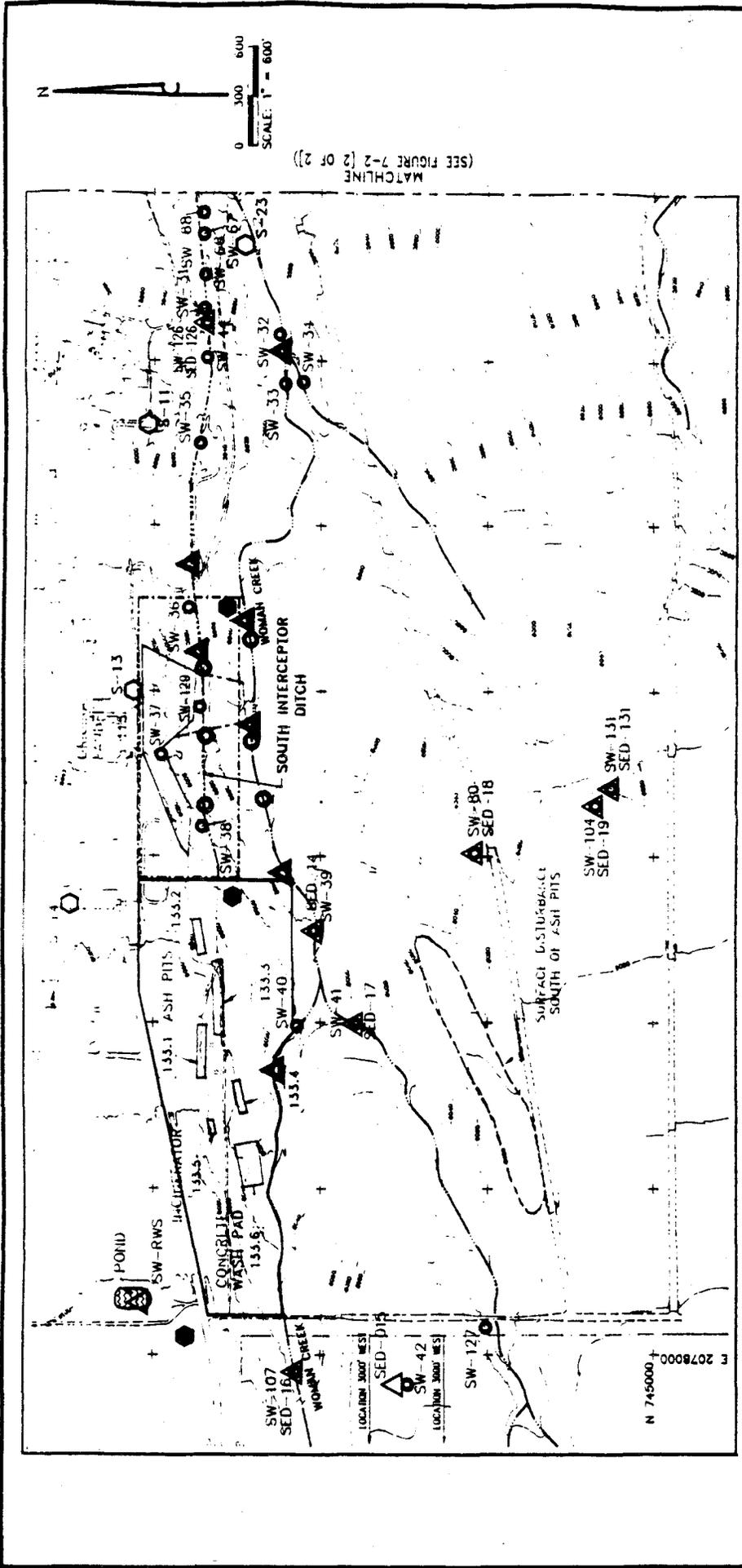
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OPERABLE UNIT 5  
PHASE 1 RFI/RI WORK PLAN

PROPOSED SAMPLING AND  
WELL LOCATIONS  
IHSS 115  
ORIGINAL LANDFILL

Figure 3  
REV. AUGUST 1991  
MARCH 1991





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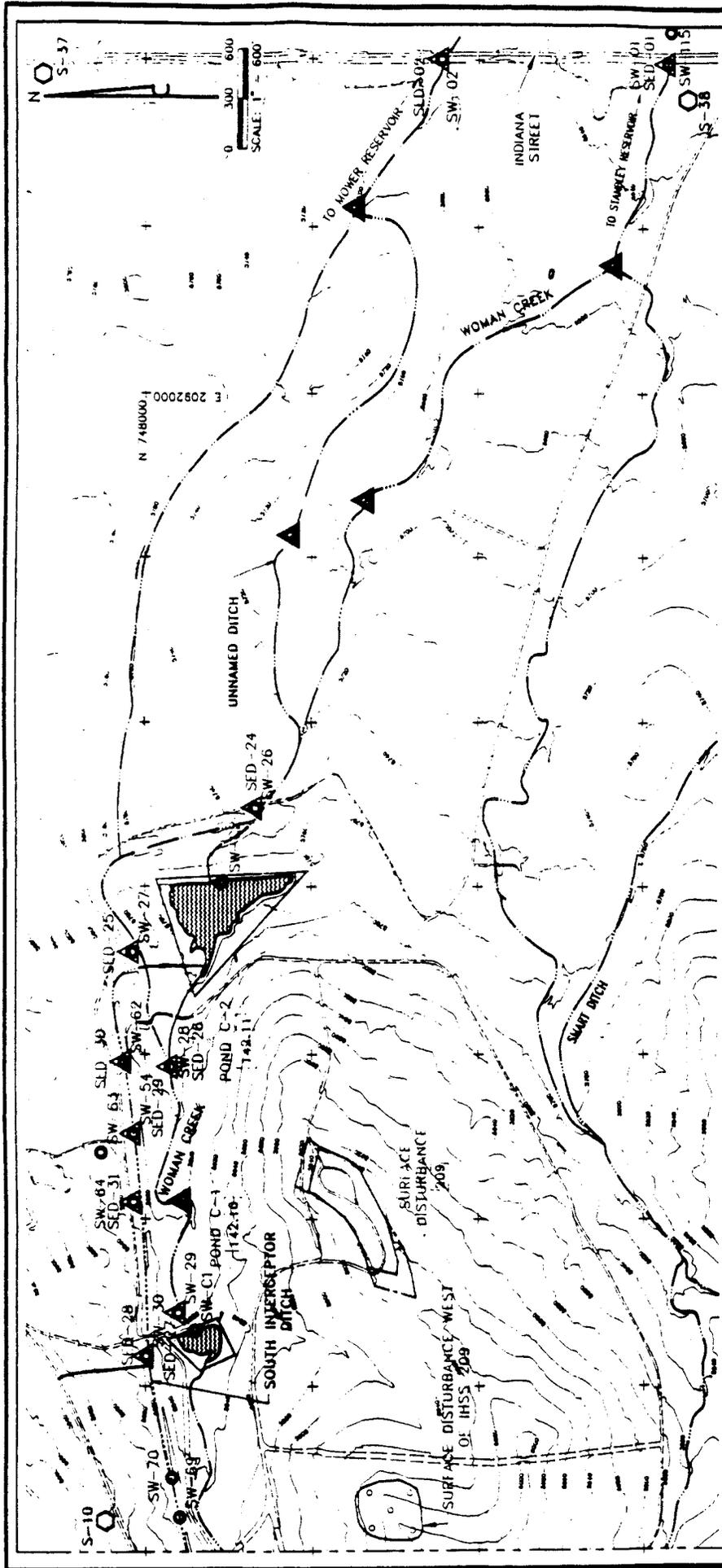
OPERABLE UNIT 5  
 PHASE 1 RFI/RI WORK PLAN

**SEDIMENT & SURFACE WATER  
 SAMPLING SITES & AIR MONITORING  
 STATIONS ALONG WOMAN CREEK AND  
 THE SOUTH INTERCEPTOR DITCH**

REV AUGUST 1991  
 MARCH 1991

Figure 4

EXPLANATION	
▲	PROPOSED SEDIMENT SAMPLE LOCATION
●	PROPOSED RADIOACTIVE AMBIENT AIR MONITORING PROGRAM LOCATION
○	PROPOSED SURFACE WATER LOCATION
—	PROPOSED URANIUM SURVEY FOR ASH PIT AREA
---	1980 URANIUM SURVEY BOUNDARY AROUND OLD TANK III
▲	INDIVIDUAL HAZARDOUS SUBSTANCE SITE
○	EXISTING SURFACE WATER LOCATION
△	EXISTING SEDIMENT SAMPLING LOCATION
---	INTERMITTENT STREAM
---	DIRT ROAD
---	PRELIMINARY EXTENSION OF THE SURFACE DISTURBANCE BASED ON A RECONNAISSANCE
○	EXISTING RADIOACTIVE AMBIENT AIR MONITORING PROGRAM LOCATION



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 OPERABLE UNIT 5  
 PHASE 1 RFI/RI WORK PLAN  
 SEDIMENT & SURFACE WATER  
 SAMPLING SITES & AIR MONITORING  
 STATIONS ALONG WOMAN CREEK AND  
 THE SOUTH INTERCEPTOR DITCH

EXISTING RADIOACTIVE AMBIENT AIR  
 MONITORING PROGRAM LOCATION  
 PROPOSED SEDIMENT  
 SAMPLE LOCATION

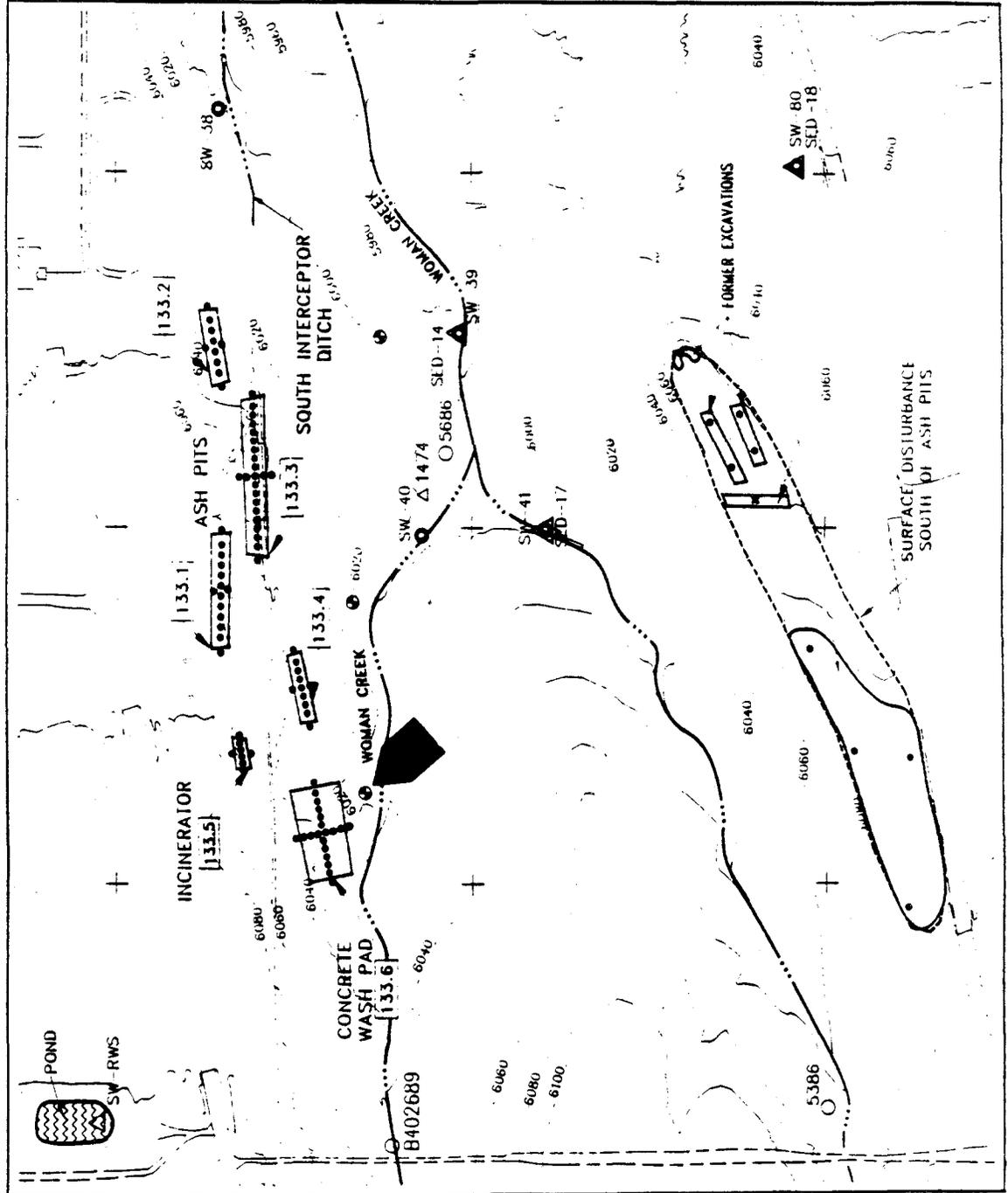
**EXPLANATION**

(115) INDIVIDUAL HAZARDOUS SUBSTANCE SITE S-23  
 SW-10 EXISTING SURFACE WATER LOCATION  
 SW-11 EXISTING SEDIMENT SAMPLING LOCATION  
 --- INTERMITTENT STREAM  
 --- DIRT ROAD  
 --- PRELIMINARY EXTENSION OF THE SURFACE  
 DISTURBANCE BASED ON A RECONNAISSANCE  
 --- ORIGINAL STREAM CHANNEL (NEAR  
 POND C-7)

MATCHLINE  
 (SEE FIGURE 7-2 [1 OF 2])

BY: AUGUST 1991  
 MARCH 1991

Figure 5



**EXPLANATION**

- INDIVIDUAL HAZARDOUS SUBSTANCE SILL
- EXISTING SURFACE WATER SAMPLING LOCATION
- EXISTING ALLUVAL GROUNDWATER MONITORING WELL
- △ EXISTING SEDIMENT SAMPLING LOCATION
- △ PRE-1986 MONITORING WELL
- PROPOSED SOIL BORING LOCATION
- PROPOSED WELL LOCATION
- × PROPOSED SURFACE SAMPLING LOCATION
- INTERMITTENT STREAM
- - - - - DIRT ROAD

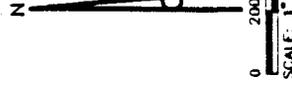
\*ALL PROPOSED LOCATIONS ARE APPROXIMATE

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OPERABLE UNIT 5  
 PHASE 1 REI/RI WORK PLAN

PROPOSED SAMPLING & WELL LOCATIONS,  
 ASH PITS 1-4, INCINERATOR,  
 CONCRETE WASH PAD (HSS 133.1-6),  
 AND ADDITIONAL SURFACE DISTURBANCE

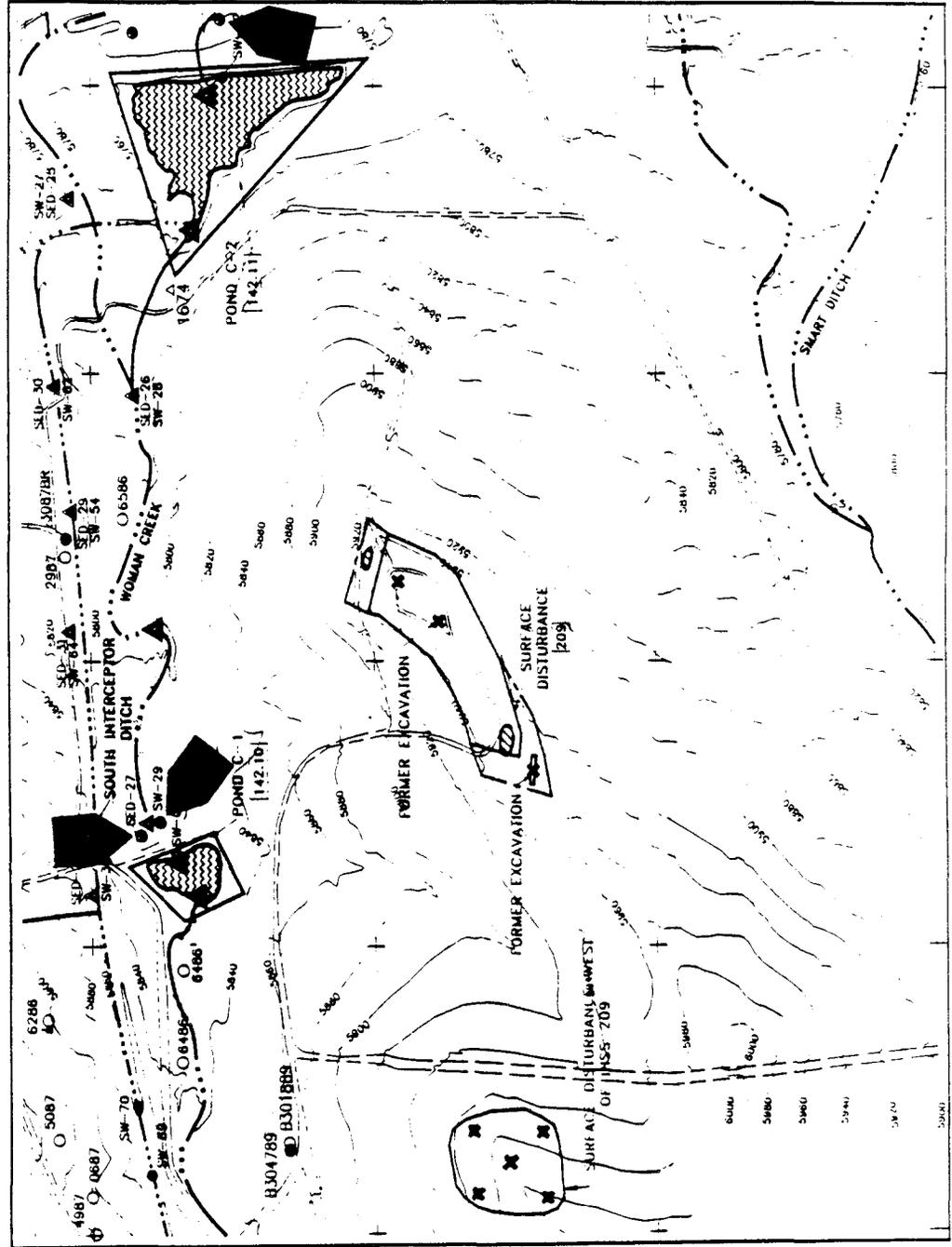
Figure b  
 REV AUGUST 1991  
 MARCH 1991



**EXPLANATION**

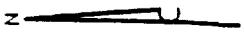
- 1115
  - SW-1 ○ INDIVIDUAL HAZARDOUS SUBSTANCE SITE
  - 5/06 ○ EXISTING SURFACE WATER SAMPLING LOCATION
  - SED-17 ○ EXISTING ALLUVAL GROUNDWATER MONITORING WELL
  - SED-17 △ EXISTING SEDIMENT SAMPLING LOCATION
  - 3087 ● EXISTING BEDROCK GROUNDWATER MONITORING WELL
  - POND/RAKE DEPRESSION
  - INTERMITTENT STREAM
  - DIRT ROAD
  - PRELIMINARY EXTENSION OF THE SURFACE DISTURBANCE BASED ON A SITE RECONNAISSANCE
  - ORIGINAL STREAM CHANNEL NEAR POND C-2
  - ✕ PROPOSED SURFACE SAMPLE LOCATION
  - PROPOSED WELL LOCATION\*
  - ▲ PROPOSED SEDIMENT SAMPLING LOCATION\*\*
- \* \* \* OTHER LOCATIONS IN EACH POND WILL BE SELECTED AT RANDOM  
 \*\* ALL PROPOSED LOCATIONS ARE APPROXIMATE

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 OPERABLE UNIT 5  
 PHASE 1 RTI/RI WORK PLAN  
 PROPOSED SAMPLING & WELL LOCATIONS,  
 IHSS 142.10-11, PONDS C-1 & C-2,  
 IHSS 209 SURFACE DISTURBANCE, & IHSS  
 SURFACE DISTURBANCE WEST OF  
 IHSS 209





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0 200 400  
SCALE: 1" = 400'

**EXPLANATION**

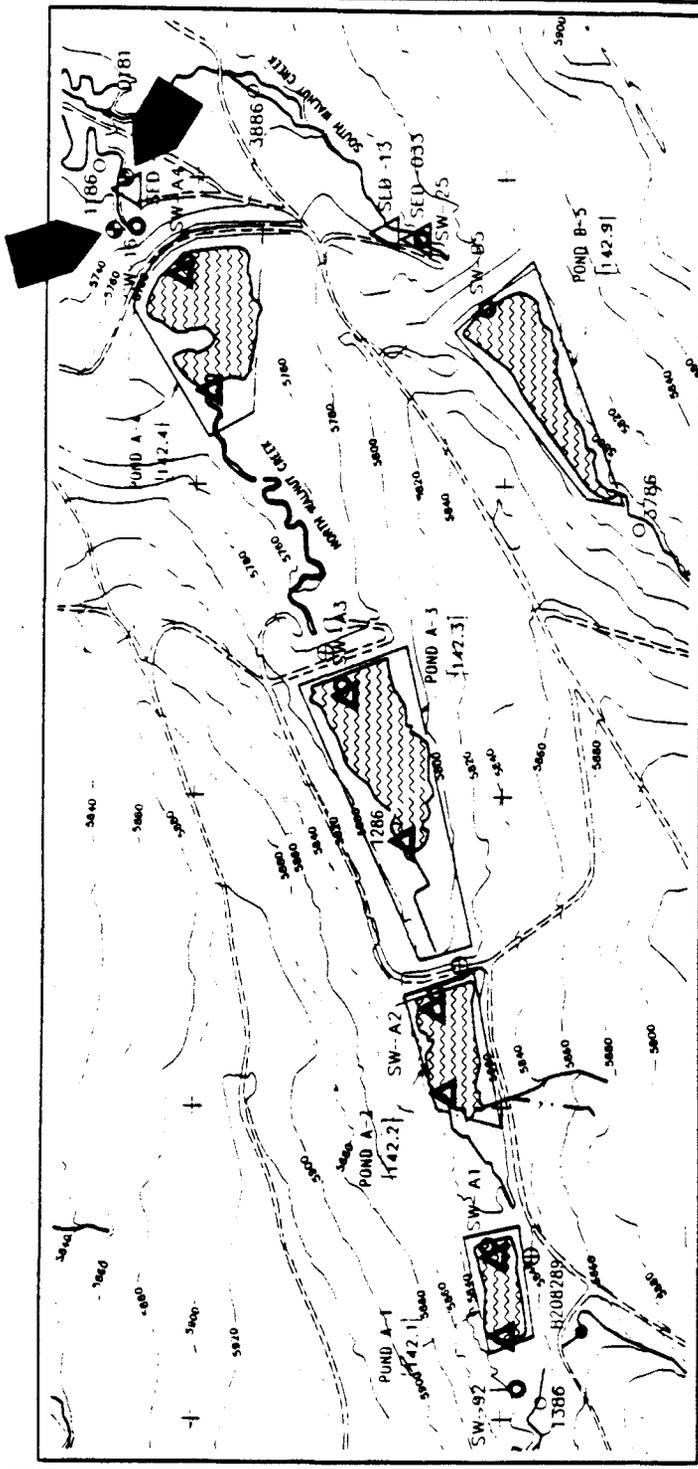
- INDIVIDUAL HAZARDOUS SUBSTANCE SITE
- EXISTING SURFACE WATER SAMPLING LOCATION
- EXISTING ALLUVIAL GROUNDWATER MONITORING WELL
- EXISTING SEDIMENT SAMPLING LOCATION
- EXISTING BEDROCK GROUNDWATER MONITORING WELL
- EXISTING PRE-1986 WELL
- INTERMITTENT STREAM
- DIRT ROAD
- PROPOSED WELL LOCATION<sup>1</sup>
- PROPOSED SEDIMENT SAMPLE LOCATION<sup>1</sup>
- PROPOSED BEDROCK WELL LOCATIONS FOR SITE-WIDE GEOLOGICAL CHARACTERIZATION PROGRAM<sup>1</sup> These wells are shown in figure 11.

<sup>1</sup> ALL PROPOSED LOCATIONS ARE APPROXIMATE

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OPERABLE UNIT 6  
PHASE 1 RFI/RI WORK PLAN

PROPOSED SAMPLING & WELL LOCATIONS  
IHSSs 142.1-4  
A-SERIES DETENTION PONDS  
ALONG NORTH WALNUT CREEK

Figure 9 APRIL 1991



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0 150 300  
SCALE: 1" = 300'

**EXPLANATION**

- 11. INDIVIDUAL HAZARDOUS SUBSTANCE SITE
- SW 1
- EXISTING SURFACE WATER SAMPLING LOCATION
- 5786
- EXISTING ALLUVAL GROUNDWATER MONITORING WELL
- SED-17
- EXISTING SEDIMENT SAMPLING LOCATION
- INTERMITTENT STREAM
- DIRT ROAD
- ROCKY FLATS BLDG NO
- PROPOSED WELL LOCATION<sup>1</sup>
- PROPOSED BORING AND SURFACE SAMPLE<sup>1</sup> LOCATION
- PROPOSED SEDIMENT SAMPLE LOCATION<sup>1,2</sup>
- PROPOSED BEDROCK WELL LOCATIONS FOR SITE-WIDE GEOLOGICAL CHARACTERIZATION PROGRAM<sup>1</sup>
- PROPOSED WELL LOCATIONS FOR SITE-WIDE GEOLOGICAL CHARACTERIZATION PROGRAM<sup>1</sup>
- PROPOSED OTHER LOCATIONS IN EACH POND WILL BE SELECTED AT RANDOM

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OPERABLE UNIT 6  
PHASE 1 RTI/RI WORK PLAN

PROPOSED SAMPLING & WELL LOCATIONS  
IHSS 142.5-9,  
B-SERIES DETENTION PONDS  
ALONG SOUTH WALNUT CREEK  
IHSS 216.1 EAST AREA SPRAY FIELD

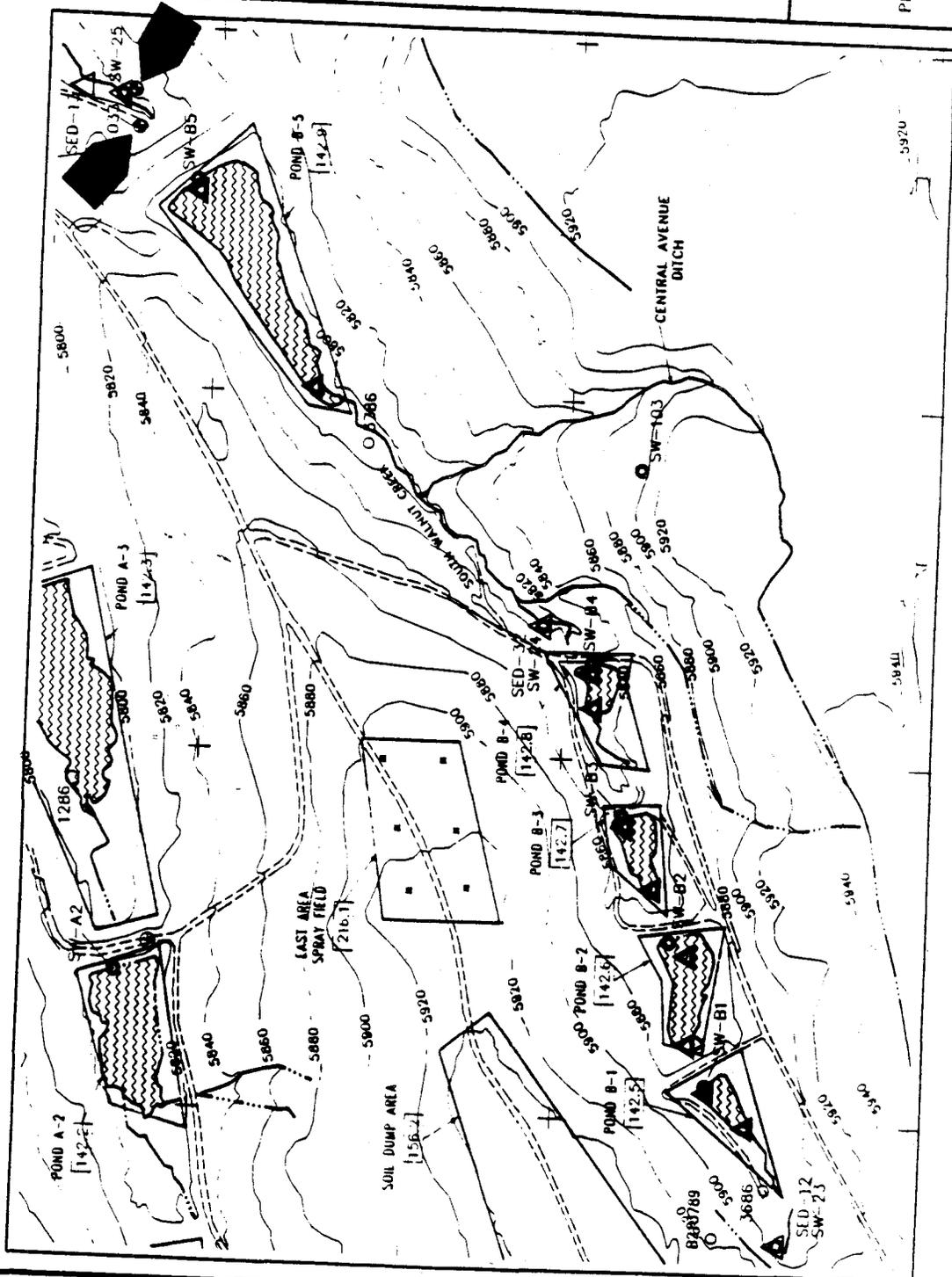


Figure 10

APRIL 1991



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0 300 600  
SCALE: 1" = 600'

**EXPLANATION**



INDIVIDUAL HAZARDOUS SUBSTANCE SITE  
(IHSS) IN OPERABLE UNIT 6

IHS

SW-1



EXISTING SURFACE WATER SAMPLING LOCATION

SLD-17



EXISTING SEDIMENT SAMPLE LOCATION

DIRT ROAD



PROPOSED LOCATIONS FOR SEDIMENT SAMPLES<sup>1</sup>

<sup>1</sup> ALL PROPOSED LOCATIONS ARE APPROXIMATE

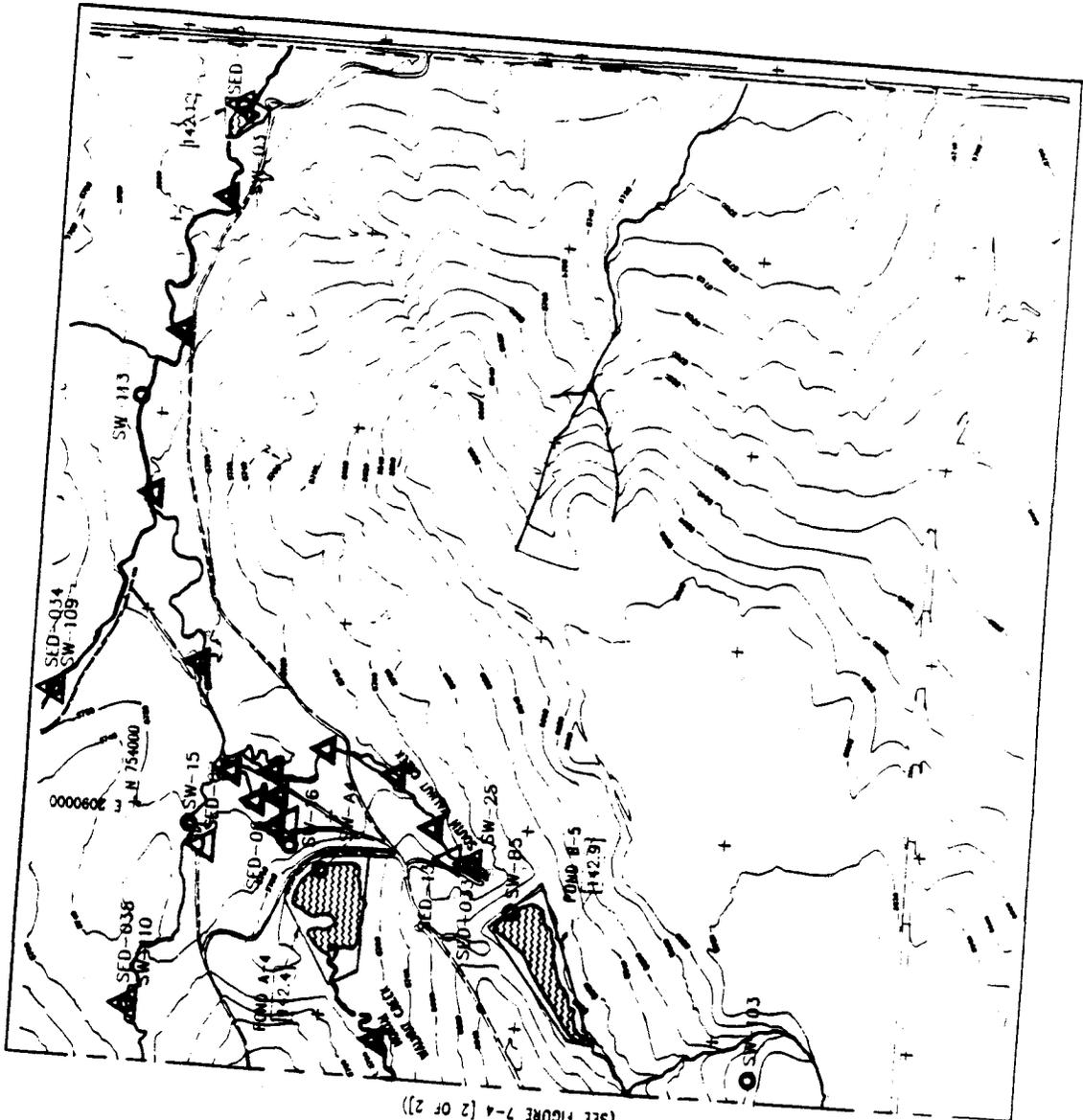
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Rocky Flats Plant, Golden, Colorado

OPERABLE UNIT 6  
PHASE I RFI/RI WORK PLAN

SEDIMENT SAMPLING SITES AND  
SITE-WIDE PROGRAM BEDROCK WELLS  
ON NORTH AND SOUTH  
WALNUT CREEKS

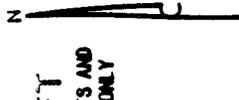
Figure 12

APRIL 1991



MATCHLINE  
(SEE FIGURE 7-4 [2 OF 2])

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**EXPLANATION**

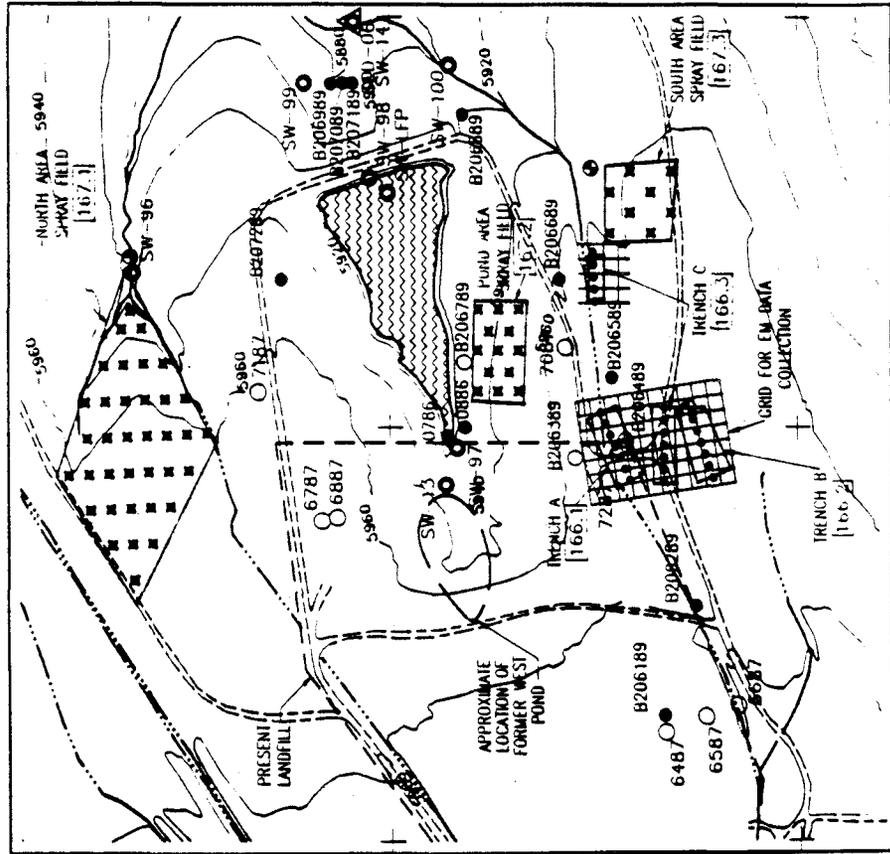
- INDIVIDUAL HAZARDOUS SUBSTANCE SITE
- EXISTING SURFACE WATER SAMPLING LOCATION
- EXISTING ALLUVAL GROUNDWATER MONITORING WELL
- EXISTING SEDIMENT SAMPLING LOCATION
- EXISTING BEDROCK GROUNDWATER MONITORING WELL
- INTERMITTENT STREAM
- DIRT ROAD
- PROPOSED SOIL BORING LOCATION<sup>1</sup>
- PROPOSED WELL LOCATION<sup>1</sup>
- PROPOSED BORING AND SURFACE SAMPLE LOCATION<sup>1</sup>
- PROPOSED ELECTROMAGNETIC SURVEY LINE LOCATION<sup>1</sup>

<sup>1</sup> ALL PROPOSED LOCATIONS ARE APPROXIMATE

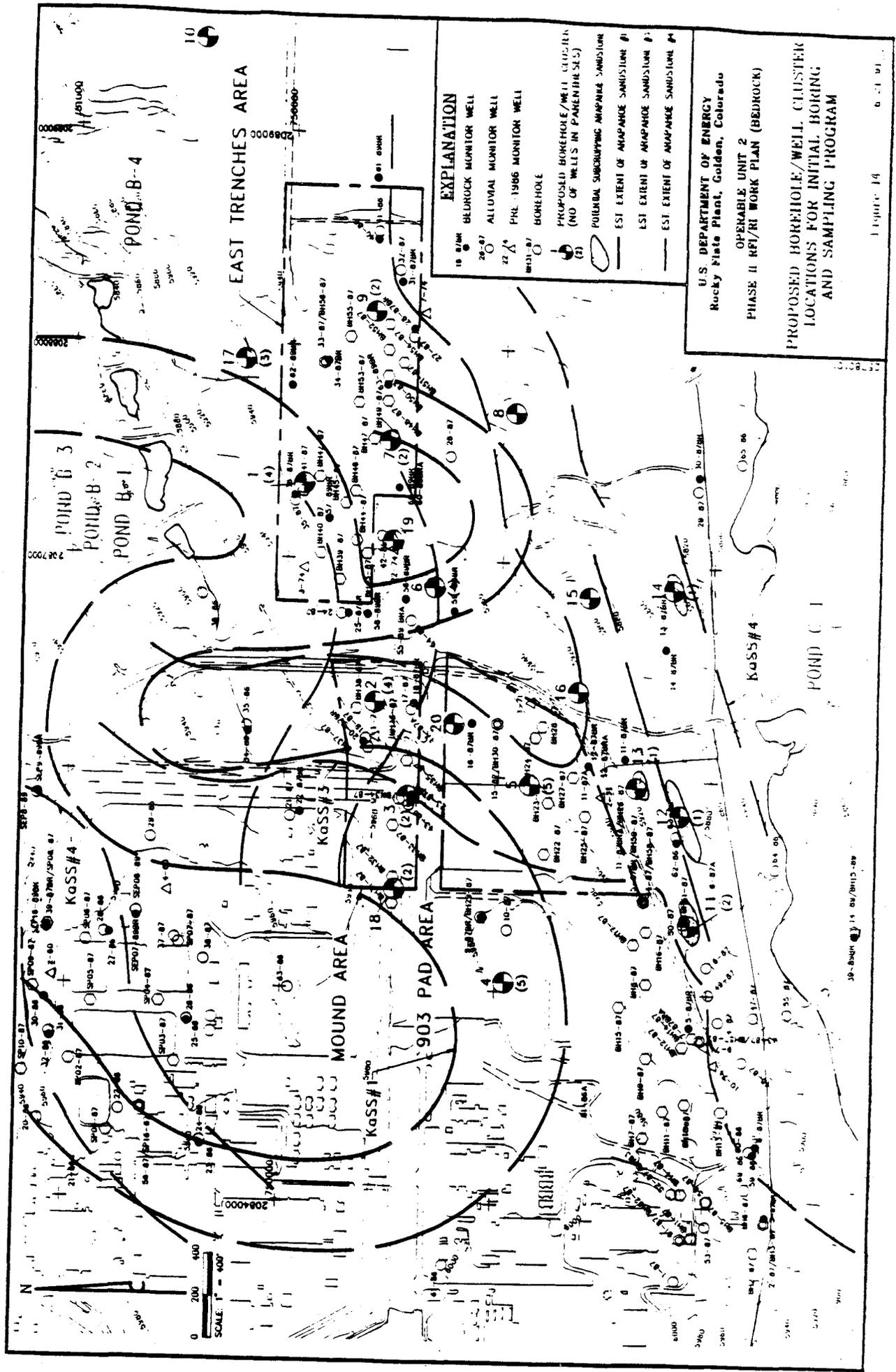
U.S. DEPARTMENT OF ENERGY  
Rocky Flats Plant, Golden, Colorado

OPERABLE UNIT 6  
PHASE I RFI/RI WORK PLAN

PROPOSED SAMPLING & WELL LOCATIONS  
IHSSs 166.1-3, TRENCHES A, B, & C  
IHSSs 167.1-3 NORTH AREA,  
POND AREA AND SOUTH AREA



Preliminary information from the U. S. Army Corps of Engineers shows no flood plain for the drainageways on this map.



**EXPLANATION**

19-22	BEADROCK MONITOR WELL
23-31	ALLUVIAL MONITOR WELL
32-33	PHL 1966 MONITOR WELL
34-35	BOREHOLE
(1)	PROPOSED BOREHOLE/WELL CLUSTER (NO. OF WELLS IN PARENTHESIS)
(2)	POTENTIAL SUBCRIPING ANAPAROE SANDSTONE
(3)	EST. EXTENT OF ANAPAROE SANDSTONE #1
(4)	EST. EXTENT OF ANAPAROE SANDSTONE #2
(5)	EST. EXTENT OF ANAPAROE SANDSTONE #4

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OPERABLE UNIT 2  
 PHASE II NF/RI WORK PLAN (BEADROCK)

PROPOSED BOREHOLE/WELL CLUSTER  
 LOCATIONS FOR INITIAL BORING  
 AND SAMPLING PROGRAM

30-848K 15 09/0112-09